

## DRAFT PERMIT MODIFICATION

**[NOTE: The proposed modifications to the 2009 Permit are noted in bold red after the cover page.]**

### AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act, as amended, 33 U.S.C. ' ' 1251 et seq. (the "CWA"), and the Massachusetts Clean Waters Act, as amended, M.G.L. Chap. 21, ' ' 26-53,

#### **ExxonMobil Oil Corporation**

is authorized to discharge from a facility located at

**ExxonMobil Everett Terminal  
52 Beacham Street  
Everett, MA 02149**

to receiving water named

#### **Island End River/Mystic River Watershed (MA71)**

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit was signed on September 29, 2008 and became effective on January 1, 2009 ("2009 Permit"), to the extent described in the Notice of Uncontested and Severable Conditions, dated November 20, 2008, issued by the Regional Administrator of Region 1 of the United States Environmental Protection Agency ("Notice"). The 2009 Permit superseded the prior permit issued on March 6, 2000, to the extent described in the Notice.

This draft permit modification shall become effective on the first day of the calendar month immediately following 60 days after signature.

This permit and the authorization to discharge shall expire at midnight on **January 1, 2014**.

This permit consists of 17 pages in Part I, including effluent limitations and monitoring requirements, 25 pages in Part II, including General Conditions and Definitions, and 10 pages in Attachment A, Marine Acute Toxicity Test Procedure and Protocol.

Signed this \_\_ day of \_\_\_\_\_, 2009.

\_\_\_\_\_  
Stephen S. Perkins, Director  
Office of Ecosystem Protection

Environmental Protection Agency  
Boston, MA

NPDES Permit No. MA0000833

\_\_\_\_\_  
Glenn Haas, Director  
Division of Watershed  
Management  
Department of Environmental  
Protection

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Massachusetts  
Boston, MA

## DRAFT PERMIT MODIFICATION

### PART I

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

##### 1. Definitions

- a. *Conventional oil water separator* refers to the secondary gravity-type separator in the ExxonMobil Everett Terminal treatment works, at the approximate location identified on Attachment \_\_\_\_.
- b. *Continuous treatment system* refers to the treatment system that is designed to remove pollutants from dry weather and stormwater flows up to its design capacity of 280 gpm in the ExxonMobil Everett Terminal treatment works, at the approximate location identified on Attachment \_\_\_\_.
- c. *Corrugated plate separator* refers to the main separator with a design capacity of 4,000 gpm in the ExxonMobil Everett Terminal treatment works, at the approximate location identified on Attachment \_\_\_\_.
- d. *Minimum Level (ML)* shall mean the level at which the entire analytical system gives recognizable mass spectra and/or acceptable calibration points. This level corresponds to the lowest point at which the calibration curve is determined based on analyses for the pollutant of concern in ~~a~~-reagent water. The ML for a gas chromatographic-mass spectrometry method or inductively coupled plasma-mass spectrometry method is based on both mass spectra and acceptable calibration points. The ML for methods that do not use mass spectrometry for pollutant confirmation and/or have no published ML in the method documentation is based on the method detection limit (MDL) as described in Section 9.3.1.1 of "Protocol for EPA Approval of New Methods for Organic and Inorganic Analytes in Wastewater and Drinking Water" (EPA 821-B-98-003, March 1999). The ML has been applied in determinations of pollutant measurements by gas chromatography combined with mass spectrometry.
- e. *"10-year 24-hour precipitation event"* shall mean a rainfall event with a probable recurrence interval of once in ten years. This information is available from National Oceanic & Atmospheric Administration, U.S. Department of Commerce. The 10-year 24-hour rainfall in Boston is estimated at 4.6 inches [Figure 2, Natural Resources Conservation Service Technical Release 55 (TR-55) - Urban Hydrology for Small Watersheds (1986)].

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2. During the period beginning from the effective date and lasting through expiration, the permittee is authorized to discharge corrugated plate separator effluent from **Serial Number Outfall 01A** to the culvert at Island End River. The discharge is comprised of storm water, groundwater, hydrostatic test water, boiler condensate, fire testing water, truck wash water, effluent pond water and filter backwash water. Such discharge shall: 1) be limited and monitored by the permittee as specified below; and 2) not cause a violation of the State Water Quality Standards of the receiving water.

**Commented [R1]:** Please explain source of filter backwash water in 01A discharge.

**Commented [L2]:** Filter backwash water results from flushing of sand filters associated with new continuous treatment system

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirements <sup>(1)</sup>	
		Average Monthly	Maximum Daily	Measurement Frequency <sup>(2)</sup>	Sample Type
Flow Rate <sup>(3)</sup>	MGD	Report	Report	Continuous	Meter
Total Suspended Solids (TSS)	mg/l	30	100	1/Month	Grab
Oil and Grease (O&G)	mg/l	----	15	1/Month	Grab
pH <sup>(4)</sup>	S.U.	----	6.5 to 8.5	1/Month	Grab
Available Cyanide <sup>(5)</sup>	µg/L	----	Report	Quarterly	Grab
Total Mercury <sup>(6)</sup>	µg/L	----	Report	Quarterly	Grab
<b>Polycyclic Aromatic Hydrocarbons (PAHs) <sup>(7)(8)</sup></b>					
Group I:					
Benzo(a)anthracene	µg/L	----	0.031	Quarterly	Grab
Benzo(a)pyrene	µg/L	----	0.031	Quarterly	Grab
Benzo(b)fluoranthene	µg/L	----	0.031	Quarterly	Grab
Benzo(k)fluoranthene	µg/L	----	0.031	Quarterly	Grab
Chrysene	µg/L	----	0.031	Quarterly	Grab
Dibenzo(a,h)anthracene	µg/L	----	0.031	Quarterly	Grab
Indeno(1,2,3-cd)pyrene	µg/L	----	0.031	Quarterly	Grab
Group II:					
Acenaphthene	µg/L	----	0.031	Quarterly	Grab
Acenaphthylene	µg/L	----	0.031	Quarterly	Grab
Anthracene	µg/L	----	0.031	Quarterly	Grab
Benzo(ghi)perylene	µg/L	----	0.031	Quarterly	Grab
Fluoranthene	µg/L	----	0.031	Quarterly	Grab
Fluorene	µg/L	----	0.031	Quarterly	Grab
Naphthalene	µg/L	----	0.031	Quarterly	Grab
Phenanthrene	µg/L	----	0.031	Quarterly	Grab
Pyrene	µg/L	----	0.031	Quarterly	Grab
Total PAHs	µg/L	----	50	Quarterly	Grab
<b>Volatile Organic Compounds (VOCs)</b>					
Benzene	µg/L	----	40	Quarterly	Grab
Toluene	µg/L	----	Report	Quarterly	Grab
Ethylbenzene	µg/L	----	Report	Quarterly	Grab
Total Xylenes	µg/L	----	Report	Quarterly	Grab
Ethanol	µg/L	----	Report	Quarterly	Grab

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Methyl Tertiary-Butyl Ether (MTBE) <sup>(9)</sup>	µg/L	----	Report	Quarterly	Grab
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### Footnotes:

1. All sampling shall be representative of the effluent that is discharged through outfall 01A to the culvert at Island End River. All samples shall be analyzed using the analytical methods found in 40 CFR Part 136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR Part 136. Total Xylenes and MTBE can be analyzed using EPA Method 602. Ethanol can be analyzed using ~~method~~ EPA Method 1671.
2. Sampling frequency of 1/month is defined as the sampling of one (1) significant rain event in each calendar month. Monthly sampling is only required if there is discharge from outfall 01A during a calendar month. Sampling frequency of quarterly is defined as the sampling of one (1) event in each quarter. Quarters are defined as the interval of time between the months of: January through March, inclusive; April through June, inclusive; July through September, inclusive; and October through December, inclusive. **Quarterly sampling shall be performed concurrently with the monthly monitoring event.** The permittee shall submit to EPA and MassDEP the results of any additional testing of the parameters established for outfall 01A if conducted in accordance with EPA approved methods consistent with the provisions of 40 CFR § 122.41(l)(4)(ii).
3. For Flow Rate, the permittee shall report the maximum daily flow rate of water discharged by the facility during the reporting period. The maximum daily flow rate, which is to be measured in the units of millions of gallons per day (MGD), shall be based upon the totalizer flow results or an approved equivalent flow measuring device.
4. See Part I.A.6., Page 109.
5. Available cyanide shall be analyzed using a detection limit less than or equal to 2.0 µg/l. After submitting ten (10) consecutive quarterly sampling results that are each below the available cyanide detection limit, the permittee may submit a written request to EPA for approval to eliminate required testing for available cyanide. The permittee is required to continue testing for this pollutant at the frequency specified in the permit until notice is received by certified mail from EPA that the permittee's request has been approved and the available cyanide testing requirement eliminated.
6. Total mercury shall be analyzed using a detection limit less than or equal to 2.0 µg/l. After submitting ten (10) consecutive quarterly sampling results that are each below the total mercury detection limit, the permittee may submit a written request to EPA for approval to eliminate required testing for total mercury. The permittee is required to continue testing for this pollutant at the frequency specified in the permit until notice is received by certified mail from EPA that the permittee's request has been approved and the total mercury testing requirement eliminated.
7. Compliance/non-compliance for Polycyclic Aromatic Hydrocarbons (PAHs) for discharges at outfall 01A shall be 10 µg/l for individual PAHs.
8. Analytical methods used to measure PAHs shall use minimum levels no greater than the minimum levels identified in Part I.A.20 on page 119.
9. MTBE shall be analyzed using EPA Method 602 with an effluent matrix-specific minimum level (ML). The ML shall be calculated as described in the definition at A.1.d of Part I of this permit.

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The method detection limit (MDL) that is used to develop the ML shall be determined by the laboratory using the procedure in Appendix B of 40 CFR Part 136.~~a detection limit less than or equal to 5 µg/l. MTBE shall be analyzed using a detection limit less than or equal to 2.0 µg/l.~~ After submitting ten (10) consecutive quarterly sampling results that are each below the MTBE Minimum Level~~detection limit~~, the permittee may submit a written request to EPA for approval to eliminate required testing for MTBE. The permittee is required to continue testing for this pollutant at the frequency specified in the permit until notice is received by certified mail from EPA that the permittee's request has been approved and the MTBE testing requirement eliminated.

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3. During the period beginning from the effective date and lasting through expiration, the permittee is authorized to discharge conventional oil water separator effluent from **Serial Number Outfall- 01B** to the culvert at Island End River. The discharge is comprised of storm water, groundwater, hydrostatic test water, boiler condensate, fire testing water, truck wash water and effluent pond water. Such discharge shall: 1) be limited and monitored by the permittee as specified below; and 2) not cause a violation of the State Water Quality Standards of the receiving water.

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirements <sup>(1)</sup>	
		Average Monthly	Maximum Daily	Measurement Frequency <sup>(2)</sup>	Sample Type
Flow Rate <sup>(3)</sup>	MGD	Report	Report	Continuous	Meter
Total Suspended Solids (TSS)	mg/l	Report	Report	Each Discharge	Grab
Oil and Grease (O&G)	mg/l	----	Report	Each Discharge	Grab
pH <sup>(4)</sup>	S.U.	----	Report	Each Discharge	Grab

### Footnotes:

1. All sampling shall be representative of the effluent that is discharged through outfall 01B to the culvert at Island End River. All samples shall be analyzed using the analytical methods found in 40 CFR Part 136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR Part 136.
2. A "Discharge Event" is defined as single or multiple discharges associated with a precipitation event. A discharge event will end after 72-hours have elapsed since the previous storm event. The permittee shall record the date and duration (in hours) of the ~~discharge~~<sup>storm</sup> event(s) sampled, daily rainfall measurements or estimates (in inches) of the ~~discharge~~<sup>storm</sup> event that generated the sampled runoff, and the end of the previous measurable (greater than 0.1 inch rainfall) ~~discharge~~<sup>storm</sup> event. The permittee shall submit to EPA and MassDEP the results of any additional testing of the parameters established for outfall 01B if conducted in accordance with EPA approved methods consistent with the provisions of 40 CFR § 122.41(l)(4)(ii).
3. For Flow Rate, the permittee shall report the maximum daily flow rate of water discharged by the facility during the reporting period. The maximum daily flow rate, which is to be measured in the units of millions of gallons per day (MGD), shall be based upon the totalizer flow results or an approved equivalent flow measuring device.
4. See Part I.A.6., Page 10~~4~~.

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4. During the period beginning from the effective date and lasting through expiration, the permittee is authorized to discharge continuous treatment system effluent from **Serial Number Outfall 01C** to the culvert at Island End River. The discharge is comprised of storm water, groundwater, hydrostatic test water, boiler condensate, fire testing water, truck wash water, effluent pond water, and filter backwash water. Such discharge shall: 1) be limited and monitored by the permittee as specified below; and 2) not cause a violation of the State Water Quality Standards of the receiving water.

**Commented [R3]:** Please explain source of filter backwash water in 01C discharge.

**Commented [L4]:** Filter backwash water results from flushing of sand filters associated with new continuous treatment system

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirements <sup>(1)</sup>	
		Average Monthly	Maximum Daily	Measurement Frequency <sup>(2)</sup>	Sample Type
Flow Rate <sup>(3)</sup>	MGD	Report	Report	Continuous	Meter
Total Suspended Solids (TSS)	mg/l	30	100	1/Month	Grab
Oil and Grease (O&G)	mg/l	----	5	1/Month	Grab
pH <sup>(4)</sup>	S.U.	----	6.5 to 8.5	1/Month	Grab
Available Cyanide <sup>(5)</sup>	µg/L	----	Report	Quarterly	Grab
<u>Metals</u>					
Total Aluminum	mg/L	----	Report	Quarterly	Grab
Total Cadmium	mg/L	----	Report	Quarterly	Grab
Total Chromium	mg/L	----	Report	Quarterly	Grab
Total Copper	mg/L	----	Report	Quarterly	Grab
Total Lead	mg/L	----	Report	Quarterly	Grab
Total Mercury <sup>(6)</sup>	mg/L	----	Report	Quarterly	Grab
Total Nickel	mg/L	----	Report	Quarterly	Grab
Total Zinc	mg/L	----	Report	Quarterly	Grab
<u>Whole Effluent Toxicity (WET)<sup>(7,8)</sup></u>					
LC <sub>50</sub>	%	----	>50	2/year	Grab
Total Solids	mg/L	----	Report	2/year	Grab
Ammonia	mg/L	----	Report	2/year	Grab
Total Organic Carbon	mg/L	----	Report	2/year	Grab

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Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirements <sup>(1)</sup>	
		Average Monthly	Maximum Daily	Measurement Frequency <sup>(2)</sup>	Sample Type
<u>Polycyclic Aromatic Hydrocarbons (PAHs)<sup>(9)</sup></u>					
Group I:					
Benzo(a)anthracene	µg/L	----	0.018	1/Month	Grab
Benzo(a)pyrene	µg/L	----	0.018	1/Month	Grab
Benzo(b)flouranthene	µg/L	----	0.018	1/Month	Grab
Benzo(k)fluoranthene	µg/L	----	0.018	1/Month	Grab
Chrysene	µg/L	----	0.018	1/Month	Grab
Dibenzo(a,h)anthracene	µg/L	----	0.018	1/Month	Grab
Indeno(1,2,3-cd)pyrene	µg/L	----	0.018	1/Month	Grab
Group II:					
Acenaphthene	µg/L	----	0.031	1/Month	Grab
Acenaphthylene	µg/L	----	0.031	1/Month	Grab
Anthracene	µg/L	----	0.031	1/Month	Grab
Benzo(ghi)perylene	µg/L	----	0.031	1/Month	Grab
Fluoranthene	µg/L	----	0.031	1/Month	Grab
Fluorene	µg/L	----	0.031	1/Month	Grab
Naphthalene	µg/L	----	0.031	1/Month	Grab
Phenanthrene	µg/L	----	0.031	1/Month	Grab
Pyrene	µg/L	----	0.031	1/Month	Grab
<u>Volatile Organic Compounds (VOCs)</u>					
Benzene	µg/l	----	5	1/Month	Grab
Toluene	µg/l	----	Report	1/Month	Grab
Ethylbenzene	µg/l	----	Report	1/Month	Grab
Total Xylenes	µg/l	----	Report	1/Month	Grab
BTEX <sup>(10)</sup>	µg/l	----	100	1/Month	Grab
Methyl Tertiary-Butyl Ether (MTBE) <sup>(11)</sup>	µg/l	----	70	1/Month	Grab

### Footnotes:

1. All sampling shall be representative of the effluent that is discharged through outfall 01C to the culvert at Island End River. All samples shall be analyzed using the analytical methods found in 40 CFR Part 136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR Part 136. Total Xylenes and MTBE can be analyzed using EPA Method 602.
2. Sampling frequency of 1/month is defined as the sampling of once each calendar month. Sampling frequency of quarterly is defined as the sampling of one (1) event in each quarter. Quarters are defined as the interval of time between the months of: January through March, inclusive; April through June, inclusive; July through September, inclusive; and October through December, inclusive. **Quarterly sampling shall be performed concurrently with the monthly**

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**monitoring event.** The permittee shall submit to EPA and MassDEP the results of any additional testing of the parameters established for outfall 01C if conducted in accordance with EPA approved methods consistent with the provisions of 40 CFR §122.41(l)(4)(ii).

3. For Flow Rate, the permittee shall report the maximum daily flow rate of water discharged by the facility during the reporting period. The maximum daily flow rate, which is to be measured in the units of millions of gallons per day (MGD), shall be based upon the totalizer flow results or an approved equivalent flow measuring device.
4. See Part I.A.6, Page 9.
5. Available cyanide shall be analyzed using a detection limit less than or equal to 2.0 µg/l. After submitting ten (10) consecutive quarterly sampling results that are each below the available cyanide detection limit, the permittee may submit a written request to EPA for approval to eliminate required testing for available cyanide. The permittee is required to continue testing for this pollutant at the frequency specified in the permit until notice is received by certified mail from EPA that the permittee's request has been approved and the available cyanide testing requirement eliminated.
6. Total mercury shall be analyzed using a detection limit less than or equal to 2.0 µg/l. After submitting ten (10) consecutive quarterly sampling results that are each below the total mercury detection limit, the permittee may submit a written request to EPA for approval to eliminate required testing for total mercury. The permittee is required to continue testing for this pollutant at the frequency specified in the permit until notice is received by certified mail from EPA that the permittee's request has been approved and the total mercury testing requirement eliminated.
7. LC50 (Lethal Concentration 50 Percent) is the concentration of wastewater (effluent) causing mortality to 50 percent (%) of the test organisms. Therefore, a 50% limit means that a sample of 50% effluent shall cause no more than a 50% mortality rate. The limit is considered to be a maximum daily limit.
8. The permittee shall conduct 48-Hour Static Acute Whole Effluent Toxicity (WET) test on effluent samples from Outfall 01C two times a year, in March and September, using one specie, Mysid Shrimp (~~Mysidopsis Bahía~~*Americamysis bahia*) and following the protocol in Attachment A (Marine Acute Toxicity Test Procedure and Protocol dated September 1996). Toxicity test results are to be submitted within 30 days after the sampling date with the routine Discharge Monitoring Reports (DMRs). Results of wet chemistry analyses conducted on WET test samples may be submitted to meet quarterly metals monitoring requirements. In that case, metals data would be submitted in the discharge monitoring report and in the WET test written report.
9. Compliance/non-compliance for Polycyclic Aromatic Hydrocarbons (PAHs) for discharges at outfall 01C will be based on the minimum level (ML) of analysis, as defined in Part 1.A.1. See Part I.A.20, Page 110 for the required MLs.
10. BTEX shall be reported as the sum of the detectable concentrations of benzene, toluene, ethylbenzene and xylenes.
11. MTBE shall be analyzed using EPA Method 602 with an effluent matrix-specific minimum level (ML). The ML shall be calculated as described in the definition at A.1.d of Part I of this permit. The method detection limit (MDL) that is used to develop the ML shall be determined by the laboratory using the procedure in Appendix B of 40 CFR Part 136a~~detection limit less than or equal to 5 µg/l. MTBE shall be analyzed using a detection limit less than or equal to 2.0 µg/l.~~

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After submitting ten (10) consecutive quarterly sampling results that are each below the MTBE ~~Minimum Level~~~~detection limit~~, the permittee may submit a written request to EPA for approval to eliminate required testing for MTBE. The permittee is required to continue testing for this pollutant at the frequency specified in the permit until notice is received by certified mail from EPA that the permittee's request has been approved and the MTBE testing requirement eliminated.

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### Part 1.A. (Continued)

5. The discharges either individually or in combination shall not cause or contribute to a violation of State Water Quality Standards of the receiving waters.
6. The pH of the effluent shall not be less than 6.5 nor greater than 8.5 at any time unless these values are exceeded as a result of natural causes.
7. The discharge shall not cause objectionable discoloration of the receiving waters.
8. The discharge shall not contain a visible oil sheen, foam, or floating solids at any time.
9. The discharge shall not contain materials in concentrations or combinations which are hazardous or toxic to human health, aquatic life of the receiving surface waters or which would impair the uses designated by its classification.
10. There shall be no discharge of tank bottom water and/or bilge water alone or in combination with storm water discharge or other wastewater.
11. There shall be no discharge of floor wash water from the interior of the facility maintenance garage.
12. The discharge shall not impart color, taste, turbidity, toxicity, radioactivity or other properties which cause those waters to be unsuitable for the designated uses and characteristics ascribed to their use.
13. Notwithstanding specific conditions of this permit, the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.
14. The permittee shall inspect, operate, and maintain the continuous treatment system, conventional oil water separator and the corrugated plate separator at the facility to ensure that the Effluent Limitations and [Monitoring Requirements and other](#) ~~C~~conditions contained in this permit are met. The permittee shall ensure that all components of the facility's Storm Water Pollution Prevention Plan, including those that specifically address the operation and maintenance of the separator(s) and other components of the storm water conveyance system, are complied with.
15. Chemicals (e.g., disinfecting agents, detergents, emulsifiers, etc.) and bioremedial agents including microbes shall not be added to the collection and treatment systems without prior approval by the U. S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP).
16. There shall be no discharge of any sludge and/or bottom deposits that has been physically removed from any storage tank(s), basin(s), and/or diked area(s) to the receiving waters. Examples of storage tanks and/or basins include, but are not limited to: primary catch basins, stilling basins, oil water separators, petroleum product storage tanks, baffled storage tanks collecting spills, and tank truck loading rack sumps.
17. No truck washing or hydrostatic testing shall occur during a storm event or following an overflow event or following a discharge event through outfall 01B until the potential for discharge through outfall 01B has ceased.
18. EPA may modify this permit in accordance with EPA regulations in 40 Code of Federal Regulations (CFR) § 122.62 and § 122.63 to incorporate more stringent effluent limitations, increase the frequency of analyses, or impose additional sampling and analytical requirements.
19. The appearance of any size sheen attributable to the discharge from this facility shall be reported

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immediately by the permittee to the National Response Center in accordance with Section 311 of the Clean Water Act (CWA). This requirement is in addition to any reporting requirements related to EPA or MassDEP contained in this National Pollutant Discharge Elimination System (NPDES) permit.

20. PAH analysis shall include the following compounds and their respective minimum levels (as defined in part I.A.1) as identified in parenthesis for each compound. benzo(a)anthracene (<0.05 µg/L), benzo(a)pyrene (<0.05 µg/L), benzo(b)fluoranthene (<0.05 µg/L), benzo(k)fluoranthene (<0.05 µg/L), chrysene (<0.5 µg/L), dibenzo(a,h)anthracene (<0.10 µg/L), indeno(1,2,3-cd)pyrene (<0.10 µg/L), and naphthalene (5.00 µg/L), acenaphthene (<5.00 µg/L), acenaphthylene (<5.00 µg/L), anthracene (<2.0 µg/L), benzo(ghi)perylene (<0.2 µg/L), fluoranthene (<0.50 µg/L), fluorene (<0.5 µg/L), naphthalene (<5.00 µg/L), phenanthrene (<2.00 µg/L), and pyrene (<1.00 µg/L).
21. The permittee shall attach a copy of the laboratory case narrative to the respective Discharge Monitoring Report Form submitted to EPA and MassDEP for each sampling event reported. The laboratory case narrative shall include a copy of the laboratory data sheets for each analysis (identifying the test method, the analytical results, and the detection limits for each analyte) and provide a brief discussion of whether all appropriate QA/QC procedures were met and were within acceptable limits.
22. All existing manufacturing, commercial, mining and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:
  - a. That any activity has occurred or will occur which would result in the discharge, on a routine basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:
    - i One hundred micrograms per liter (100 µg/L);
    - ii Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
    - iii Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R. § 122.21(g)(7); or
    - iv Any other notification level established by the Director in accordance with 40 C.F.R. § 122.44(f)
  - b. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following “notification levels”:
    - i Five hundred micrograms per liter (500 µg/L);
    - ii One milligram per liter (1 mg/L) for antimony;
    - iii Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R. § 122.21(g)(7).
    - iv Any other notification level established by the Director in accordance with 40 C.F.R. § 122.44(f).
  - c. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.
23. Wastewater Treatment System Flow
  - a. The continuous treatment system shall be designed, constructed, maintained and operated to treat the volume of storm water, groundwater and other associated wastewaters up to and including

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280 gpm through outfall 01C.

- b. The collection, storage and treatment systems shall be designed, constructed, maintained and operated to treat the total equivalent volume of storm water, groundwater, hydrostatic test water, boiler condensate, fire testing water, truck wash water, effluent pond water and filter backwash water which would result from a 10-year 24-hour precipitation event, which volume shall be discharged through outfall 01C and, followed by outfall 01A. All wet weather and dry weather discharges less than or equal to the design capacity of the continuous treatment system [280 gpm] shall be treated through the continuous treatment system and discharged at outfall 01C. The flow through the corrugated plate separator shall not exceed 4,000 gpm.
- c. Discharge from outfall 01B shall be limited to situations when the combined capacity of the facility to collect, store, treat and discharge wastewater through outfalls 01A and 01C is exceeded. As a result, it is expected that discharges through outfall 01B will occur only in extreme weather events or other extenuating circumstances.
- d. The permittee shall certify that the facility's collection storage and treatment systems have been designed, constructed, maintained and operated to meet the requirements of this permit. The certification shall be signed in accordance with the requirements identified in 40 CFR § 122.22. A copy of this certification shall be sent to EPA and MassDEP within sixtythree (63) days of the effective date of the Permit.
- e. Written notification and approval by EPA and the MassDEP shall be required, should the permittee propose changes to the storm water conveyance, storage or treatment systems which have the potential to cause the maximum design flow rate through any portion of the wet and dry weather collection, storage and treatment systems to be increasedexceeded.

### 24. Toxics Control

- a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.
- b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

### 25. Hydrostatic Test Water Discharges

- a. The hydrostatic test water shall be monitored as described below and discharged through outfalls 01A and 01C to the culvert at Island End River.
- b. At a minimum, four (4) representative samples shall be taken of the hydrostatic test water: one (1) grab sample of the influent test water; and three (3) serial-grab samples of the hydrostatic test water effluent. The influent grab sample shall be taken approximately midway through the fill segment of the hydrostatic test procedure. The three (3) effluent serial-grab samples shall be taken over the duration of the entire discharge segment of the hydrostatic test procedure. The first effluent serial-grab sample shall be taken during the initial phase of discharge; the second around the midpoint; and the third near the end of the discharge. The effluent serial-grab samples shall be obtained before discharge into the treatment works and/or mixing with any storm water or other non-storm water flow.

These influent and effluent samples shall be analyzed for the following parameters:

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Effluent Characteristic	Units	Sample Type
Total Suspended Solids (TSS)	mg/l	Grab
Oil and Grease (O&G)	mg/l	Grab
pH <sup>(7)</sup>	S.U.	Grab
Dissolved Oxygen (DO)	mg/l	Grab
Total Residual Chlorine	mg/l	Grab
Benzene	µg/l	Grab
Toluene	µg/l	Grab
Ethylbenzene	µg/l	Grab
Total Xylenes	µg/l	Grab
Methyl Tertiary-Butyl Ether	µg/l	Grab
<u>PAHs</u>		
Benzo(a)anthracene	µg/l	Grab
Benzo(a)pyrene	µg/l	Grab
Benzo(b)fluoranthene	µg/l	Grab
Benzo(k)fluoranthene	µg/l	Grab
Chrysene	µg/l	Grab
Dibenzo(a,h)anthracene	µg/l	Grab
Indeno(1,2,3-cd)pyrene	µg/l	Grab
Acenaphthene	µg/l	Grab
Acenaphthylene	µg/l	Grab
Anthracene	µg/l	Grab
Benzo(ghi)perylene	µg/l	Grab
Fluoranthene	µg/l	Grab
Fluorene	µg/l	Grab
Naphthalene	µg/l	Grab
Phenanthrene	µg/l	Grab
Pyrene	µg/l	Grab

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- c. Testing for total residual chlorine is only required when potable water or a similar source of water which is likely to contain a residual chlorine concentration is used for hydrostatic testing. Testing for MTBE is only required if the tank undergoing testing was recently (i.e., within three years of the proposed testing date) used to store gasoline containing MTBE.
- d. During discharge (i.e., approximately at the same time the three effluent grab samples are taken), the flow exiting the treatment system should be observed in order to prevent the inadvertent release of hydrocarbons to the receiving water(s). In the event that there is evidence of such a release (e.g., visible oil sheen and/or noticeable increase in turbidity of discharge water), the permittee shall immediately halt the discharge of hydrostatic test water and take steps to correct the problem.
- e. Any changes to these procedures must be approved by EPA and the MassDEP prior to their implementation.
- f. The permittee shall submit a letter/report to EPA and MassDEP, summarizing the results of the hydrostatic test within forty-five (45) days of completion of the test. This report shall contain: the

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date(s) during which the hydrostatic testing occurred; the estimated volume of hydrostatic test water discharged; a copy of the laboratory data sheets for each analyses, providing the test method, the detection limits for each analyte, and a brief discussion of whether all appropriate QA/QC procedures were met and were within acceptable limits; and a comparison of the overall test results with the effluent limitations for outfall 01C in this permit.

- g. The U.S. Environmental Protection Agency shall reserve the right to re-open the permit, in accordance with 40 CFR § 122.62(a)(2), to limit hydrostatic test water discharges in the event that sampling results indicate that such discharge has a reasonable potential to cause or contribute to a violation of Massachusetts Water Quality Standards in the Island End River.

### **B. STORM WATER POLLUTION PREVENTION PLAN**

1. The permittee shall develop, implement, and maintain a Storm Water Pollution Prevention Plan (SWPPP) designed to reduce, or prevent, the discharge of pollutants in storm water to the receiving waters identified in this permit. The SWPPP shall be a written document and consistent with the terms of this permit. The permittee shall comply with the terms of its SWPPP.
2. The SWPPP shall be completed or updated and signed by the Permittee within 90 days after the effective date of this Permit. The Permittee shall certify that the SWPPP has been completed or updated and that it meets the requirements of the permit. The certification shall be signed in accordance with the requirements identified in 40 CFR § 122.22. A copy of this initial certification shall be sent to EPA and MassDEP within one hundred and twenty (120) days of the effective date of the Permit.
3. The SWPPP shall be consistent with the provisions for SWPPPs included in the most current version of the Multi-Sector General Permits for Storm Water Discharges Associated with Industrial Activities. (The current MSGP was issued September 29, 2008 – see 73 FR 56572). The SWPPP shall include best management practices (BMPs) for on-site activities that will minimize the discharge of pollutants in storm water to waters of the United States.
4. The SWPPP shall be prepared in accordance with good engineering practices, identify potential sources of pollution that may reasonably be expected to affect the quality of the storm water discharges, and describe and ensure implementation of practices which will be used to reduce the pollutants and assure compliance with this permit. Specifically, the SWPPP shall contain the elements listed below:
  - a. A pollution prevention team responsible for developing, implementing, maintaining, revising and ensuring compliance with the SWPPP.
  - b. A site description which includes a list of activities at the facility; a site map showing drainage areas and direction of storm water flows; receiving waters and outfall location; areas of the facility where industrial materials or activities are exposed to storm water including the location of industrial activities, storage, disposal, material handling; and all structural controls.
  - c. A summary of all pollutant sources which includes all areas where spills have occurred or could occur. For each source, identify the expected drainage and the corresponding pollutant.
  - d. A summary of any existing storm water discharge sampling data.
  - e. A description of all storm water controls, both structural and non-structural. BMPs must include good housekeeping measures, preventative maintenance programs, spill prevention and response procedures, runoff management practices, and proper handling of deicing materials. The



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SWPPP shall describe how the BMPs are appropriate for the facility. All BMPs shall be properly maintained and be in effective operating conditions.

5. All areas of the facility where industrial materials or activities are exposed to storm water shall be inspected, at least on a quarterly basis. Inspections shall occur beginning the 1<sup>st</sup> quarter after the effective date of the permit. EPA considers quarters as follows: January to March; April to June; July to September; and October to December.
6. The permittee shall amend and update the SWPPP within 30 days for any changes at the facility affecting the SWPPP. Changes which may affect the SWPPP include, but are not limited to, the following activities: a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to the waters of the United States; a release of a reportable quantity of pollutants as described in 40 CFR Part 302; or a determination by the permittee or EPA that the SWPPP appears to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. Any amended or new versions of the SWPPP shall be re-certified by the Permittee. Such re-certifications also shall be signed in accordance with the requirements identified in 40 CFR § 122.22
7. The permittee shall certify at least annually that the previous year's inspections and maintenance activities were conducted, results were recorded, records were maintained, and that the facility is in compliance with the SWPPP. If the facility is not in compliance with any aspect of the SWPPP, the annual certification shall state the non-compliance and the remedies which are being undertaken. Such annual certifications also shall be signed in accordance with the requirements identified in 40 CFR § 122.22. A copy of this annual certification shall be sent to EPA and MassDEP on, or before, every anniversary of the effective date of the permit. The permittee shall keep a copy of the current SWPPP and all SWPPP certifications (the initial certification, re-certifications, and annual certifications) signed during the effective period of this permit at the facility and shall make them available for inspection by EPA and MassDEP.

### C. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report Form(s) postmarked no later than the 15th day of the month following the effective date of the permit.

Signed and dated originals of these, and all other reports and evaluations required herein, shall be submitted to EPA at the following address:

EPA New England - Region 1  
Water Technical Unit (SEW)  
P.O. Box 8127  
Boston, Massachusetts 02114

Signed and dated Discharge Monitoring Report Form(s) and all other reports required by this permit shall also be submitted to the State at the following addresses:

Massachusetts Department of Environmental Protection  
Northeast Regional Office  
Bureau of Waste Prevention  
205 B Lowell Street  
Wilmington, MA 01887

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and  
Massachusetts Department of Environmental Protection  
Division of Watershed Management  
Surface Water Discharge Permit Program  
627 Main Street, 2nd Floor  
Worcester, Massachusetts 01608

### D. STATE PERMIT CONDITIONS

1. This Discharge Permit is issued jointly by the EPA and the MassDEP under Federal and State law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MassDEP pursuant to M.G.L. Chap.21, '43.
2. Each Agency shall have the independent right to enforce the terms and conditions of this Permit. Any modification, suspension or revocation of this Permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this Permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this Permit is declared, invalid, illegal or otherwise issued in violation of State law such permit shall remain in full force and effect under Federal law as a NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this Permit is declared invalid, illegal or otherwise issued in violation of Federal law, this Permit shall remain in full force and effect under State law as a Permit issued by the Commonwealth of Massachusetts.

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